



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
Group Art Unit 3677

In re

Patent Application of

Glen William Wallis

Application No. 10/805,675

Confirmation No. 8563

Filed: March 19, 2004

"CATCHES"

I, Sharon A. Johnson, hereby certify that this correspondence is being deposited with the US Postal Service as first class mail in an envelope addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date of my signature.

Sharon A. Johnson

Signature

6/18/04

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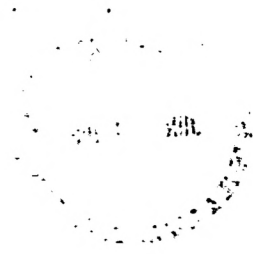
Sir:

Enclosed is a certified copy of United Kingdom Patent Application 0306522.4, filed on March 21, 2003, from which the above-identified U. S. patent application claims priority.

Respectfully submitted,
David R. Price

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100-100000



INVESTOR IN PEOPLE

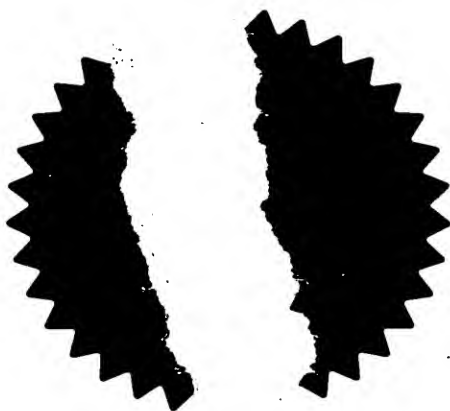
The Patent Office
Concept House
Cardiff Road
Newport
South Wales
NP10 8QQ

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Dated 15 March 2004



Patents Form 1/77

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The Patent Office
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Request for grant of a patent

1. Your Reference

AWN/CK/Y571

2. Application number

0306522.4

3. Full name, address and postcode
of the or each Applicant

Mila Hardware Limited
1 Brunel Close
Drayton Fields Industrial Estate
Daventry
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NN11 5RB

Country/state of incorporation
(if applicable)

Incorporated in: UK

7435738001

4. Title of the invention

FASTENING MECHANISM

5. Name of agent

APPLEYARD LEES

Address for service in the UK to
which all correspondence should
be sent

15 CLARE ROAD
HALIFAX
HX1 2HY

Patents ADP number

190001✓

6. Priority claimed to:

Country

Application number

Date of filing

7. Divisional status claimed from:

Number of parent application

Date of filing

8. Is a statement of inventorship and
of right to grant a patent required in
support of this application?

YES

9. Enter the number of sheets for any of the following items you are filing with this form. Do not count copies of the same document

Continuation sheets of this form

Description 4

Claim(s)

Abstract

Drawing(s) 2 + 2 

10. If you are also filing any of the following, state how many against each item

Priority documents

Translation of priority documents

Statement of inventorship and right to grant a patent (PF 7/77)

Request for a preliminary examination and search (PF 9/77)

Request for substantive examination (PF 10/77)

Any other documents (please specify)

11.

We request the grant of a patent on the basis of this application.
Signature Date

APPLEYARD LEES

20 March 2003



12. Contact

Alastair W Neill- 01422 330110

CATCHES

The invention relates to a catch and particularly to a window catch.

5 Various types of catch are known, to secure a vertically sliding window, for example a sash window, either with respect to a fixed member such as a surrounding frame, or with respect to another window. For example, it is common practice to have an upper window which can slide downwardly and a lower window which can slide upwardly. If both windows are closed with respect to a surrounding frame, and then the two
10 windows are secured together with a catch, this makes them no more secure against unauthorised entry from outside.

Main catches include a threaded member on one window which can be screwed into a threaded boss on the other window, or a snib, for example in the form of a projection
15 on one window which can be moved into engagement with a recess on the other window.

The invention seeks to provide a window catch which provides greater security than known window catches.

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The invention provides a catch for a window, the catch comprising a striker member for attachment to a first window component, and a catch member arranged for attachment to a second window member which is movable with respect to the first window member, the catch comprising at least one bolt member which can be shot
25 into locking engagement with the striker member by means of a manually rotatable lever.

Preferably, there are at least two shoot bolts, projecting from a shoot bolt carrier, rotation of the lever bringing about rotation of a cam which acts on the shoot bolt
30 carrier.

The (or each) bolt may be arranged to project into a socket or aperture on the striker member to bring about locking.

The (or each) bolt may be spring loaded, and have a tapered nose, so that when one of the window components is moved into a closed position with relation to the other window component, the shoot bolts snap into position in the striker member.

- 5 The lever may be connected to the cam via the barrel of a cylinder lock so that when the lever is in the locking position, the lever can be locked in position by means of a key.

The invention includes a window when fitted with a catch according to the invention.

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By way of example, a specific embodiment of the invention will now be described, with reference to the accompanying drawings, in which:

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Figure 1 is an exploded perspective view of an embodiment of window catch according to the invention; and

Figure 2 is a plan view of part of the catch of Figure 1, showing a cam and a shoot bolt carrier.

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The catch shown in the figures comprises a striker member 10 and a catch assembly 11.

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The striker member 10 comprises a plate with screw holes 12 therein, which in use is screwed to the frame of a lower window component, for example a lower part of a sash window. Two lugs 13 project upwardly from the plate 12 and each lug has a hole 14 therein.

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The catch assembly is secured to the frame of a second window component, for example the upper part of the sash window. The catch assembly 11 comprises a base 15 and an upper cover 16. Mounted for movement on the base are two shoot bolts 17 which are fastened to a shoot bolt carrier 18. Each shoot bolt has a tapered nose 19.

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The shoot bolt carrier 17 is urged by compression springs 20 towards the lugs 13. Thus when the two window components are moved into position to close the sash

window, the tapered nose 19 ride over the lugs 13 and the shoot bolts snap into the holes 14.

To retract the shoot bolts against the action of the springs 20, a lever 21 is swung to one side, rotating a column 22 which is connected to a cam 23 within the catch assembly. As best shown in Figure 2, the cam 23 lies adjacent to the shoot bolt carrier 18 and rotation of the cam brings about the desired movement of the shoot bolt carrier.

The lever 21 can also be used to positively move the shoot bolts into their locking position.

If desired, the column 22 may be fitted with a key operated cylinder lock 24 so that once the shoot bolts have been engaged, the lever 21 can be locked so that it can no longer be moved manually thus giving an even greater degree of security.

Although the catch according to the invention has been designed primarily to lock together two window components, for example two parts of a conventional, vertically movable sash window, it will be appreciated that the catch can of course be utilised to lock together any two adjacent components, where at least one of the components can move with respect to the other.

Attention is directed to all papers and documents which are filed concurrently with or previous to this specification in connection with this application and which are open to public inspection with this specification, and the contents of all such papers and documents are incorporated herein by reference.

All of the features disclosed in this specification (including any accompanying claims, abstract and drawings), and/or all of the steps of any method or process so disclosed, may be combined in any combination, except combinations where at least some of such features and/or steps are mutually exclusive.

Each feature disclosed in this specification (including any accompanying claims, abstract and drawings) may be replaced by alternative features serving the same, equivalent or similar purpose, unless expressly stated otherwise. Thus, unless

expressly stated otherwise, each feature disclosed is one example only of a generic series of equivalent or similar features.

5 The invention is not restricted to the details of the foregoing embodiment(s). The invention extends to any novel one, or any novel combination, of the features disclosed in this specification (including any accompanying claims, abstract and drawings), or to any novel one, or any novel combination, of the steps of any method or process so disclosed.

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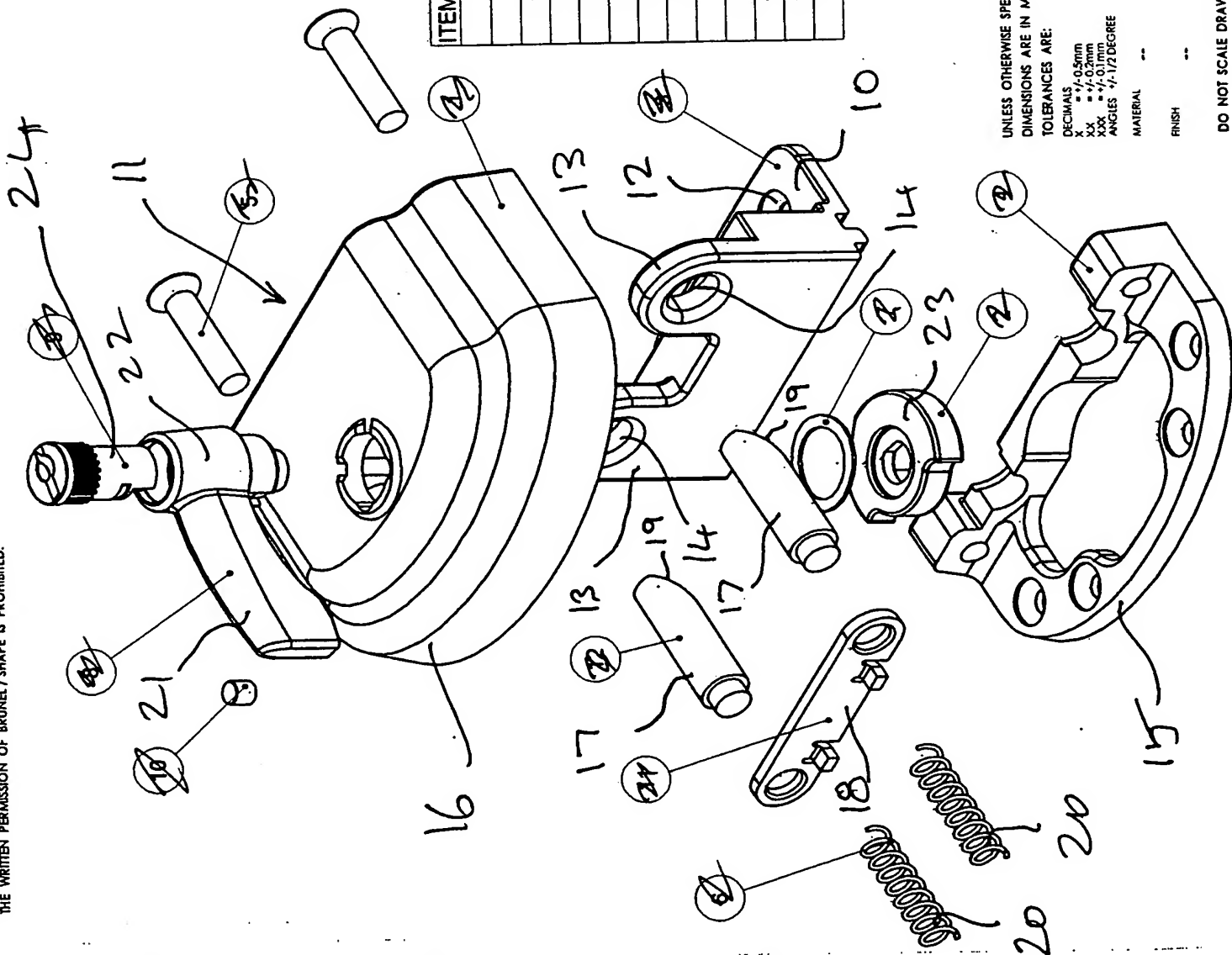


Fig 1

ITEM NO.	QTY.	DRAWING NO.	DESCRIPTION
1	1	VS.500.1001	LOCKABLE HOUSING
2	1	VS.500.1006	LOCKING CAM
3	1	VS.500.1010	ZINC STRIKER
4	1	VS.500.1003	BACK PLATE
5	2	-	SCREW
6	2	VS.500.1008	SPRING
7	1	VS.500.1009	WASHER
8	1	VS.500.1002	LEVER
9	1	VS.500.1011	LOCK BARREL
10	1	VS.500.1012	LOCKING PIN
11	1	VS.500.1005	SHOTBOLT CARRIER
12	2	VS.500.1004	SHOOTBOLT

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DIMENSIONS ARE IN MM
TOLERANCES ARE:
DECIMALS
X .1
XX .05mm
XXX .01mm
ANGLES 1/2 DEGREE

APPROVALS
DATE
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R ANDREWS
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CHECKED

MATERIAL
FINISH
DO NOT SCALE DRAWING

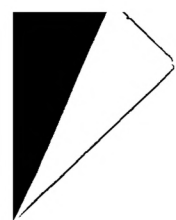
TITLE
SHOOTBOLT FITCH CATCH FOR
VERTICLE SLIDING WINDOWS

SIZE DWG. NO.
A VS.100.1000
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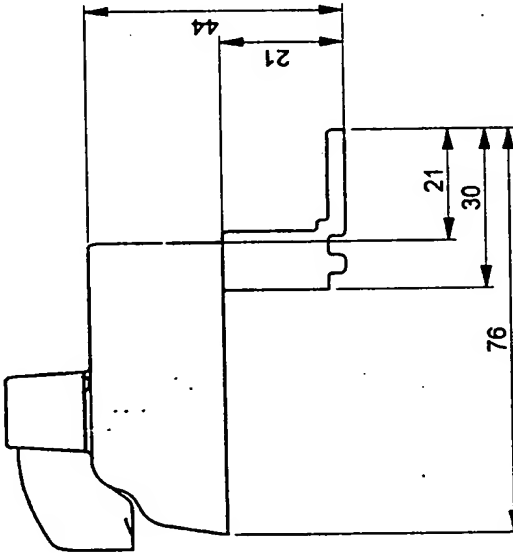
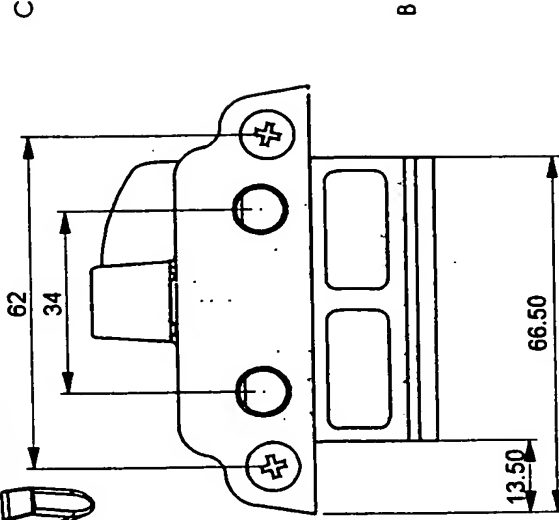
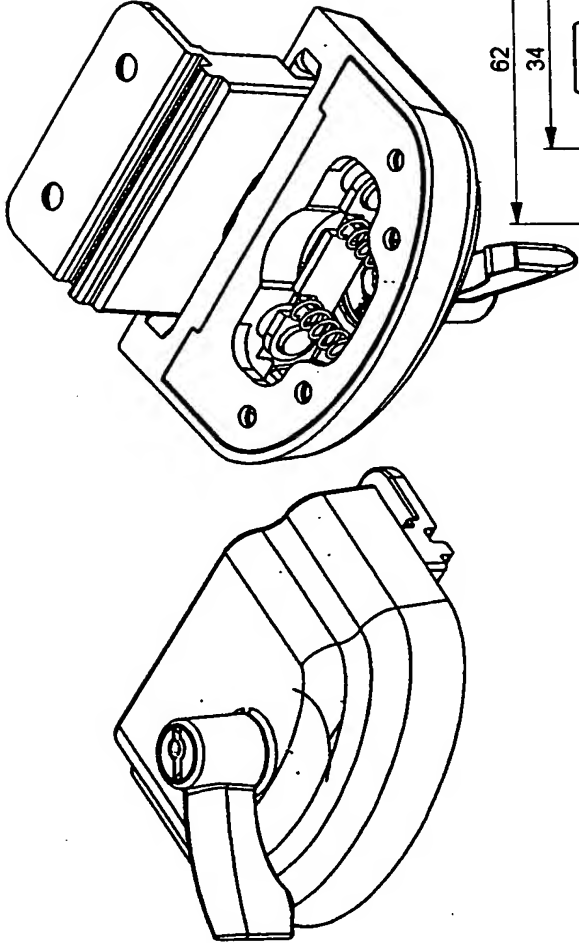
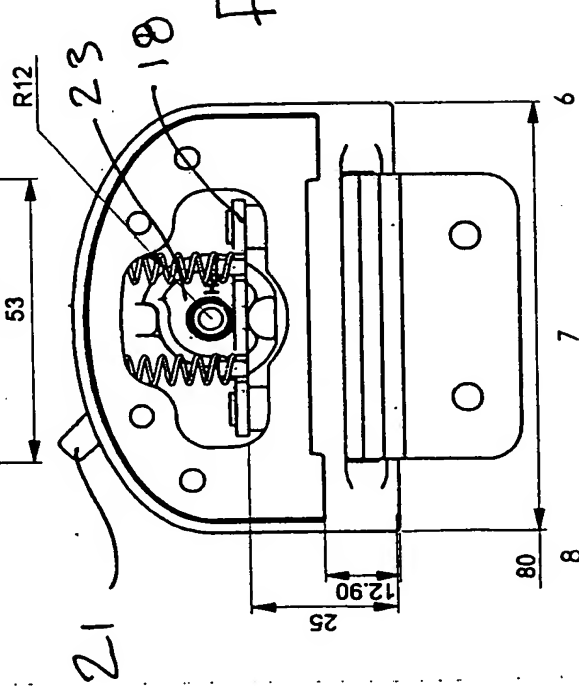
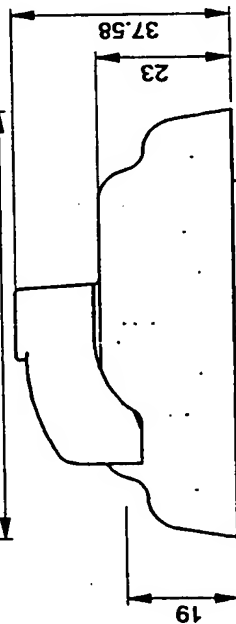
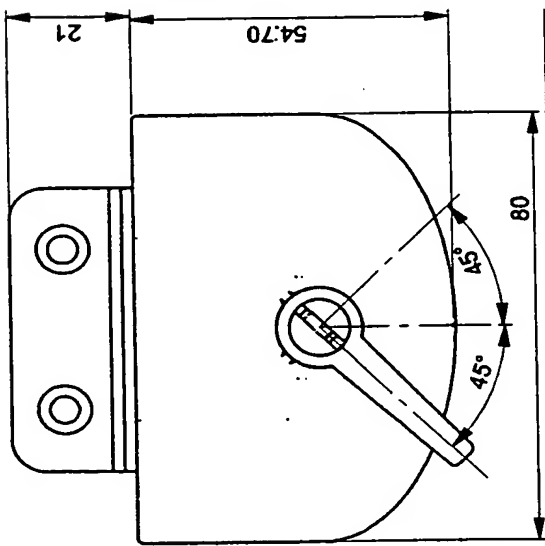


FIG-2

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DIMENSIONS ARE IN MM
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XX ± 0.2 mm
XXX ± 0.1 mm
ANGLES $\pm 1/2$ DEGREE

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